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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,825	12/14/2004	Jin-Ho Son	0630-2153PUS1	8737
2292 7590 06/28/2007 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER TAHA, SHAQ	
			ART UNIT 2109	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/517,825	Applicant(s) SON ET AL.	
	Examiner shaq taha	Art Unit 2109	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 - 20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>12/14/2004</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- Claims 1, 5, 6, 8, 9, 10, 12, 15, 16, and 20 recite the limitation "Roaming" in claims 1, 5, 6, 8, 9, 10, 12, 15, 16, and 20. There is insufficient antecedent basis for this limitation in the claim.
- Claims 2 and 17 recite the limitation "Imaginary" in claims 12 and 17. There is insufficient antecedent basis for this limitation in the claim.
- Claims 3, 4, 6, 8 - 16, and 18 - 20 recite the limitation "Role-switching" in claims 3, 4, 6, 8 - 16, and 18 - 20. There is insufficient antecedent basis for this limitation in the claim.
- Claims 4, 8, 14, 15, 19, and 20 recite the limitation "Advertisement" in claims 4, 8, 14, 15, 19, and 20. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2109

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1 – 6, 8, 9, and 11 - 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Humpleman et al (US 6,466,971).

- Regarding claim 1, Humpleman teaches a network system based on a UPnP (universal plug and play) performing a roaming function, **[In one embodiment the present invention provides a method and system for command and control among a plurality of devices via a network by: connecting a first device to the network; connecting a second device to the network, (Column 2, lines 40 – 44)];**

by including at least two CPs (control point), **[sending control and command data from the first device to the second device over the network utilizing the application interface description data to control the operation of the second device, (See Abstract), (Fig 5)];**

wherein a synchronization method of a UPnP-based home network implements a UPnP device controllable by using one of the CPs, **[(d) sending control and command data from the first device to the second device over the network utilizing said application interface description data to control the operation of the second device, Column 28, lines 24 – 27)].**

- Regarding claim 2, Humpleman teaches that the CP performs a CP function and a UPnP device function simultaneously by generating an imaginary UPnP device, **[In one embodiment the present invention provides a method and system for command and control among a plurality of devices via a network, Column 2, lines 39 – 42)]**.
- Regarding claim 3, Humpleman teaches that a UPnP device is generated by role-switching the CP, **[In cases where a receiving device 122 requires translation of a data stream, the sending device 120 can route the data stream directly to a translation server, (Column 27, lines 56 – 58)]**.
- Regarding claim 4, Humpleman teaches that the information about the CP before role switching is transmitted through an advertisement message of the UPnP device, **[Once a HNORB&IL is located, the device 14 and the HNORB&IL can establish a point-to-point Transmission Control Protocol (TCP) or User Datagram Protocol (UDP) connection for registration, interface request and fetch, and device lookup services, (Column 17, lines 37 – 42)]**.
- Regarding claim 5, Humpleman teaches that the advertisement message includes roaming state information of the UPnP device, **[The application interface description data can include remote procedure call information for the first home device to control the operation of the second home device, (Column 2, lines 57 – 60)]**.

- Regarding claim 6, Humpleman teaches that the CP is constructed to be role-switched into a UPnP device by corresponding to a key input of a user according to roaming, **[accepting user input from a user in response to the user interacting with the user interface displayed on the client device, (Column 3, lines 23 – 26)]**.
- Regarding claim 8, Humpleman teaches that the CP classifies whether a message is an advertisement message of a UPnP device or a roaming message according to role-switch of a CP, **[FIG. 12 shows an example configuration of the building blocks to perform the function of generating command messages, (Column 11, lines 40 – 42)]**;

by checking a roaming state in Device Description, information of a media server and a media renderer and a presently user selecting item, **[Referring to FIG. 4, to provide command and control between a client device 12 and the server device 14, in one embodiment, the client device 12 can include a renderer 24 for displaying a GUI 18 using a GCO 22 stored in the client device 12 or transferred to the client device 12 over the network from a desired server device 14, (Column 5, lines 65 – 67), (Column 6, lines 1 – 10)]**.

- Regarding claim 9, Humpleman teaches that the CP transmits a roaming message periodically for a certain time less than time recommended by a standard and is constructed to be role-switched again into a CP, **[The server device 14 can also include a clock 28, or maintains the current time, to allow time delay action based on time or clock input from**

a user, as described below, (Column 6, lines 62 – 65)].

- Regarding claim 11, Humpleman teaches that the operation is finished when the protocols and the data formats are corresponded, when the protocols and the data formats are not corresponded, the operation is finished after matching-corresponding the media server and the media renderer, **[The software agent can additionally match the capabilities of various server devices 14 in the network 10 and display selection information for only those server devices 14 that have compatible capabilities, (Column 8, line 67), (Column 9, lines 1 – 3)].**
- Regarding claim 12, Humpleman teaches that In a UPnP (universal plug and play)-based home network system including a CP (control point), a media server and a media renderer, wherein the CP performs a UPnP standard roaming function by being role-switched into a UPnP device, **[In one embodiment the present invention provides a method and system for command and control among a plurality of devices via a network by: connecting a first device to the network; connecting a second device to the network, (Column 2, lines 40 – 44)];**
- Regarding claim 13, Humpleman teaches that the CP is role-switched into a UPnP device by corresponding to a key input according to user's roaming, **[accepting user input from a user in response to the user interacting with the user interface displayed on the client device,**

(Column 3, lines 23 – 26)].

- Regarding claim 14, Humpleman teaches that the CP transmits CP information before role-switch by using an advertisement message of a SSDP (simple service discovery protocol) of a UPnP device, **[FIG. 12 shows an example configuration of the building blocks to perform the function of generating command messages, (Column 11, lines 40 – 42)]**;
- Regarding claim 15, Humpleman teaches that the CP is constructed to provide a roaming state in a Device Description, **[The application interface description data can include remote procedure call information for the first home device to control the operation of the second home device, (Column 2, lines 57 – 60)]**.

provide information of the media server and the media renderer; provide an item presently selected by the user; **[Referring to FIG. 4, to provide command and control between a client device 12 and the server device 14, in one embodiment, the client device 12 can include a renderer 24 for displaying a GUI 18 using a GCO 22 stored in the client device 12 or transferred to the client device 12 over the network from a desired server device 14, (Column 5, lines 65 – 67), (Column 6, lines 1 – 10)]**.

and classify whether a message is an advertisement message of a UPnP device or a roaming message according to role-switch of the CP, **[FIG. 12 shows an example configuration of**

the building blocks to perform the function of generating command messages, (Column 11, lines 40 – 42));

- Regarding claim 16, Humpleman teaches that the CP transmits a roaming message periodically for a certain time less than time recommended by a standard and is constructed to be role-switched again into a CP, **[The server device 14 can also include a clock 28, or maintains the current time, to allow time delay action based on time or clock input from a user, as described below, (Column 6, lines 62 – 65)].**
- Regarding claim 17, Humpleman teaches that in a UPnP (universal plug and play based home network system including a CP (control point), **[Method and system for command and control among a plurality of devices via a network, (Abstract)]** a media server, **[Fig. 3]** and a media renderer, **[Fig. 4]** the CP simultaneously performs a CP function and a UPnP device function by generating an imaginary UPnP device, **[In one embodiment the present invention provides a method and system for command and control among a plurality of devices via a network, Column 2, lines 39 – 42)].**
- Regarding claim 18, Humpleman teaches that the CP is constructed to be role-switched into the UPnP device by corresponding to a key input according to a user's roaming, **[accepting user input from a user in response to the user interacting with the user interface**

displayed on the client device, (Column 3, lines 23 – 26)].

- Regarding claim 19, Humpleman teaches that the CP transmits CP information before role-switch by using an advertisement message of a SSDP (simple service discovery protocol) of the UPnP device, **[Once a HNORB&IL is located, the device 14 and the HNORB&IL can establish a point-to-point Transmission Control Protocol (TCP) or User Datagram Protocol (UDP) connection for registration, interface request and fetch, and device lookup services, (Column 17, lines 37 – 42)].**
- Regarding claim 20, Humpleman teaches that the CP classifies whether a message is an advertisement message of a UPnP device or a roaming message according to role-switch of a CP, **[FIG. 12 shows an example configuration of the building blocks to perform the function of generating command messages, (Column 11, lines 40 – 42)];**
by transmitting information such as a roaming state in Device Description, information of a media server and a media renderer and a presently user selecting item periodically for a certain time less than time recommended by a standard, **[Once a HNORB&IL is located, the device 14 and the HNORB&IL can establish a point-to-point Transmission Control Protocol (TCP) or User Datagram Protocol (UDP) connection for registration, interface request and fetch, and device lookup services, (Column 17, lines 37 – 42)].**

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over , Humpleman et al. (US 6,466,971). As applied to claim 1 above, and further in view of Di Kimura et al. (US 5,267,323).

Regarding Claim 7, Humpleman teaches the method according to claim 6 as described above. Humpleman further teaches the key input includes Korean, English, figures and special characters input function, **[Fig. 24]**;

Humpleman et al. differs from the claimed invention is that a voice recognition function is not taught in Humpleman et al.

Kimura teaches a voice recognition function, **[A voice-operated remote control system has two microphone and an ambient noise remover in a transmitter. One of the microphones picks up a voice command, and the other picks up ambient noise, (See Abstract)]**.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Humpleman by including a voice recognition function as taught by

Kimura. One of ordinary skill in the art would have been motivated to make this modification in order to provide the advantage of a voice recognition function.

and judging correspondence of protocols and data formats of the media renderer before/after role-switch and finishing the operation. {103}

- Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over , Humpleman et al. (US 6,466,971). As applied to claim 1 above, and further in view of Van Ryzin et al. (US 6,127,941).

Regarding Claim 10, Humpleman teaches the method according to claim 1 as described above. Humpleman further teaches storing information of a media server and a media renderer by checking a present roaming state through the CP, **[where the second device stores application interface description data in a structured format for commanding and controlling the second device by other network devices, (See Abstract)]**;

Humpleman et al. differs from the claimed invention is that it turning-on power of a CP to be used by a user after roaming is not taught in Humpleman et al.

Van Ryzin teaches turning-on power of a CP to be used by a user after roaming, **[When the user turns the power on in the remote control unit 100, the microprocessor 112 executes an initializing routine, (Column 4, lines 59 - 62)]**.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Humpleman by including turning-on power of a CP to be used by a user as taught by Van Ryzin . One of ordinary skill in the art would have been motivated to make this modification in order to provide the advantage of turning-on power of a CP to be used by a user.

Humpleman et al. differs from the claimed invention is finishing the operation is not taught in Humpleman et al.

Kimura teaches is finishing the operation, **[If the registration is not yet finished, then the steps S7 and S8 are repeated until the registration is finished, (Column 12, lines 16 - 18)]**.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Humpleman by finishing the operation as taught by Van Ryzin . One of ordinary skill in the art would have been motivated to make this modification in order to provide the advantage of finishing the operation to be used by a user.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 5,845,282. selecting and retrieving data files from a remote computer.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Shaq Taha** whose telephone number is 571-270-1921. The examiner can normally be reached on 8:30am-5pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Jeff Pwu** can be reached on 571-272-6798.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shaq Taha

6/14/2007



JEFFREY PWU
SUPERVISORY PATENT EXAMINER